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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Syuuzi Kodama

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STAAS & HALSEY LLP

SUITE 700

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EXAMINER

PIERRE, MYRIAM

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/813,162	Applicant(s) KODAMA, SYUJIZI	
	Examiner Myriam Pierre	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the appeal brief filed on 08/22/06, PROSECUTION IS HEREBY REOPENED. The new ground of reject is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter (the limitation "original") which applicant regards as the invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ecker et al. (6,442,524) in view of Suzuki et al. (5,010,486).

As per claims 1 and 4, Ecker et al. teach:

original inputting means for inputting an original to be translated (Fig. 1 element 125)
morphological analyzing means for dividing a sequence of morphemes from the original inputted by the original inputting means (Fig. 1 element 125) converting means for converting the morphemes to conceptual categories (Fig. 2 element 238; col. 20 lines 27-31; and col. 19 line 60-67) to be output
- typical verifying means (col. 16 lines 10-19) for verifying whether or not a string of predetermined typical conceptual categories (thesaurus based semantic) exists in a sequence of the conceptual categories outputted from the converting means (semantic similarity for words; verification is via hypothesis matching).

wherein the converting means has a vocabulary information file (lexicon) that defines a relationship between the conceptual categories (thesaurus based semantic) and the morphemes contained therein (col. 16 lines 10-19; col. 20 lines 27-31; and col. 19 line 60-67; the lexicon is a dictionary which necessarily has the semantic and morpheme information contained inside of it);

the typical sentence verifying means has a first table (parsing table, Fig. 2 element 200 and Fig. 25 element 2502) that stores a pair of the string of the predetermined conceptual categories (thesaurus based semantic; col. 12 line 57-col. 13 line 6) and the pattern of the predetermined translated sentence corresponding to the string (col. 27 lines 6-17; col. 28 lines 8-14 and col. 29 lines 20-28; log information is stored regarding the parsing of the sentences based on the feature structure and unambiguous terms that is decided upon when using the semantic thesaurus).

Ecker et al. do not teach a replacing means for generating a pattern of a predetermined translated sentence corresponding to the string of the conceptual categories to replace the pattern of the predetermined translated sentence with translated words corresponding to the original morphemes of the conceptual categories constituting the pattern of the translated sentence, when the string of predetermined typical conceptual categories exists in the sequence of the conceptual categories as determined by the typical sentence verifying means and a replacing means has a second table that stores a pair of the morpheme constituting the pattern of the translated sentence and the predetermined translated word corresponding to the morpheme.

However, Suzuki et al. do teach a replacing means for generating a pattern of a predetermined translated sentence corresponding to the string of the conceptual categories to replace the pattern of the predetermined translated sentence with translated words corresponding to the original morphemes of the conceptual categories constituting the pattern of the translated sentence, when the string of predetermined typical conceptual categories exists in the sequence of the conceptual categories as determined by the typical sentence verifying means (col. 4 lines 19-31 and 47-55; Fig. 3 elements 2, 4, 6, 8 and 10 and Table 1) and a replacing means has a second table that stores a pair of the morpheme constituting the pattern of the translated sentence

and the predetermined translated word corresponding to the morpheme (col. 5 lines 4-8, 14-20 and 25-40).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the language translation replacement of Suzuki et al. into the Morphological translation system of Ecker et al., because Suzuki et al. teach that this would provide an intermediate language in which the computer forms and generates a sentence in the target language through the steps of morphological generation, col. 4 lines 19-31 and 47-55.

As to claim 7, Ecker et al. teach:

a method of automatically translating an original text (Fig. 14 elements 1408 and 1414), comprising:

- linking a string of predetermined conceptual categories with morphemes contained therein and a pattern of predetermined translated sentences corresponding to the string (col. 20 lines 27-31; and col. 19 line 60-67);
- converting a sequence of morphemes of the original text to conceptual categories and determining whether the string of the predetermined conceptual categories exists in the converted conceptual categories (col. 20 lines 27-31; and col. 19 line 60-67; Fig. 14 elements 1408 and 1414 for textual representation of the original and translated sentences);
- generating a pattern of a translated sentence for a string of the conceptual categories (Fig. 2 element 230 and col. 20 lines 27-32).

Ecker et al. do not teach replacing the pattern of the translated sentence with translated words corresponding to the sequence of morphemes of the translated sentence in accordance

with the linkage upon determining that the string of the predetermined typical conceptual categories exists in the converted conceptual categories.

However, Suzuki et al. do teach replacing the pattern of the translated sentence with translated words corresponding to the sequence of morphemes of the translated sentence in accordance with the linkage upon determining that the string of the predetermined typical conceptual categories exists in the converted conceptual categories (col. 19 line 60-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the language translation replacement of Suzuki et al. into the Morphological translation system of Ecker et al., because Suzuki et al. teach that this would provide an intermediate language in which the computer forms and generates a sentence in the target language through the steps of morphological generation, col. 4 lines 19-31 and 47-55.

As to claim 8, Ecker et al. teach a method for translating language, comprising:
converting morphemes to a string of conceptual categories (col. 20 lines 27-31; and col. 19 line 60-67; Fig. 14 elements 1408 and 1414 for textual representation of the original and translated sentences); and

generating a translated sentence corresponding to the string of the conceptual categories (Fig. 2 element 230 and col. 20 lines 27-32);

wherein the said converting includes dividing the morphemes and comparing the divided morphemes against a vocabulary information file formed of a specific library to extract the divided morphemes as conceptual categories and extract a conceptual category defined by a definition included within the information file when a target morpheme satisfies a condition of

each definition included within the vocabulary information file (Fig. 2 element 230; col. 19 lines 60-67; col. 20 lines 27-32; and col. 29 lines 20-28; log information is stored regarding the parsing of the sentences based on the feature structure and unambiguous terms that is decided upon when using the semantic thesaurus).

3. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ecker et al. (6,442,524) in view of Suzuki et al. (5,010,486) as applied to claims 1 and 4 above, and further in view of Takeda et al. (5,895,446).

As to claims 3 and 6, Ecker et al. teach the automatic translator (Fig. 2 element 230).

Ecker et al. do not explicitly teach a computer readable medium wherein at least one of the vocabulary information file.

However, Suzuki et al. do teach a computer readable medium wherein at least one of the vocabulary information file (col. 4 lines 9-14).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the language translation replacement of Suzuki et al. into the Morphological translation system of Ecker et al., because Suzuki et al. teach that this would provide dictionaries for the use of translation (Suzuki et al., col. 4 lines 9-14).

Ecker et al. in view of Suzuki do not explicitly teach that the vocabulary information file is defined or set by a user.

However, Takeda et al. teach a vocabulary information file defined or set by the user a translation system the can be easily customized by the user (col. 1, lines 42-44).

Therefore, it would have been obvious for one of ordinary skill at the time of invention to have Ecker et al. in view of Suzuki's user defined translation analyzer be supplemented by the

user defined option taught by Takeda because this would allow the a significant advantage that such a system can easily be customized because the user can define translations patterns easily, as taught by Takeda, col. 1 lines 40-46.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. see attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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AU 2626
11/09/06

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